

processing the three dimensional image only at those addresses which correspond to two dimensional addresses characteristic of three dimensional features, to determine the altitude of those three dimensional features, and;

rejecting the IC package if the altitude of the three dimensional features fall outside predetermined boundaries.

23. (Amended) A method as in claim 22 where the coplanarity value is determined by calculating planes of repose.

24. (Amended) A method as in claim 22 where the coplanarity value is determined by calculating a best fit plane using least squares.

30. (Amended) A method for evaluating the quality of an IC package where the IC package includes a plurality of three dimensional features, the method comprising:

acquiring a two dimensional image characteristic of a portion of the IC package, the two dimensional image defined by a plurality of pixels having at least an address and a pixel intensity;

acquiring a three dimensional image characteristic of the portion of the IC package, the three dimensional image defined by a plurality of pixels having at least an address and an altitude;

comparing the two dimensional image against a two dimensional template and rejecting the quality of the IC package if the comparison reveals that the two dimensional image does not include three dimensional features in an expected configuration;

processing the two dimensional image to identify a plurality of addresses which are characteristic of three dimensional features;

processing the three dimensional image only at those addresses which correspond to two dimensional addresses characteristic of three dimensional features, to determine the altitude of those three dimensional features, and;

rejecting the IC package if the altitude of the three dimensional features fall outside predetermined boundaries.

36. (Amended) A method for evaluating the quality of an IC package where the IC package includes a plurality of three dimensional features, the method comprising:

acquiring a two dimensional image characteristic of a portion of the IC package, the two dimensional image defined by a plurality of pixels having at least an address and a pixel intensity;

acquiring a three dimensional image characteristic of the portion of the IC package, the three dimensional image defined by a plurality of pixels having at least an address and an altitude;

processing the two dimensional image to identify a plurality of addresses which are characteristic three dimensional features;

determining a correspondence between the addresses in the two dimensional image and the addresses in the three dimensional image by calibrating to a machined fixture.

processing the three dimensional image only at those addresses which correspond to two dimensional addresses characteristic of three dimensional features, to determine the altitude of those three dimensional features, and;

rejecting the IC package if the altitude of the three dimensional features fall outside predetermined boundaries.

REMARKS

This is in response to the Final Office Action mailed January 2, 2003. Claims 17-41 are pending.

Claim Objections.

The Examiner objected to claim 17, 23, 24, 30 and 36 for certain informalities. While Applicant believes that these informalities were corrected in an Examiner's Amendment pursuant to a December 26, 2002 telephone conference, Applicants have made the corrections as suggested by the Examiner. It is submitted that the amendments to the claims do not raise further issues requiring further search or considerations by the Examiner, nor do the amendments add new matter to the application. It is therefore submitted that this Amendment should be entered. Alternatively, this Amendment should be entered because it places the application in better form for appeal. Applicant respectfully requests that the objections be reconsidered and withdrawn.